

[illegible]

The schematic diagram illustrates the internal wiring of a USB-C to USB-A adapter. It features three main components: a USB-C Receptacle on the left, a USB-C to USB-A IC in the center, and a USB-A Plug on the right. The USB-C Receptacle is connected to the USB-C to USB-A IC via a USB-C connector. The USB-C to USB-A IC is then connected to the USB-A Plug via a USB-A connector. The schematic shows the internal connections of the USB-C receptacle, the USB-C to USB-A IC, and the USB-A plug. Key components include the USB-C receptacle, the USB-C to USB-A IC, and the USB-A plug. The schematic is labeled with component values and pin numbers.

Diagram illustrating the pull-up resistors for the I2C bus:

- R8** (1k5) is connected to **UL_SCL** and **+3.3V**.
- R7** (1k5) is connected to **UL_SDA** and **+3.3V**.
- R20** (1k5) is connected to **NET_SDA** and **+3.3V**.
- R21** (1k5) is connected to **NET_SCL** and **+3.3V**.

The schematic diagram illustrates the internal circuitry of the STM32F405RGTx microcontroller. Key components include:

- Power Supply:** +3.3V and +3.3VA rails are connected to the microcontroller's power pins.
- Capacitors:** C11, C12, C13, C14 (100nF) are connected to the +3.3V rail. C21 and C22 (2uF) are connected to the VCAP_1 and VCAP_2 pins.
- Resistors:** R41 (0 ohms) is connected to the KB_LED pin.
- LEDs:** KB_LED is connected to the KB_LED pin.
- Microcontroller Pins:** The microcontroller is labeled STM32F405RGTx. The pins are labeled with their functions: UL_RST, UL_BOOT, MCLK, UL_LED_B54, UL_LED_G_8, UL_LED_R_9, UL_DBG1_24, UL_DBG2_25, UL_DBG3_26, UL_DBG4_36, KB_ROW539, X25_BCLK51, I2S_ADCAT52, I2S_DACDAT53, KB_COL3_3, KB_COL4_4.

Power Regulator

The diagram shows a power regulation circuit. The input voltage is +BATT, which is connected to the VIN pin of the AMS1117-3.3V voltage regulator. A 10µF capacitor (C5) is connected between VIN and GND. The output of the regulator is +3.3V, which is also labeled '3.3V to all board'. A 22µF capacitor (C2) is connected between the output and GND. Two 1N5819WS Schottky diodes are used for protection: one in series with the input and another in parallel with the output to the GND.

BATTERY - 2MM T

1 J1
BAT+
GND
Conn_01x02_Female

FIRMWARE - 2MM R

+3.3V 1 J1
MGMT_BOOT 2
MGMT_NRST 3
MGMT_SWID0 4
MGMT_SWCLK 5
GND 6
Conn_01x06_Female

PROGRAM - 2MM L

GN1.NET_TX0_MGMTJ6
NET_RX0_MGMT
+3.3V 3
Conn_01x04_Female
UI_SWID0 1 J2
GND UI_SWCLK 2
+3.3V 4
Conn_01x04_Female

UI SERIAL - 1MM B

+3.3V 1 J5
UI_TX3 2
UI_RX3 3
GND 4
Conn_01x04_Female

Display - 2MM T

1 J4 DISP_BL
2 DISP_RST
3 DISP_DC
4 DISP_CS
5 DISP_SPI_SCK
6 DISP_SPI_MOSI
7
8 VIN
C20 100n
GND
Conn_01x08_Male

HEADSET - 2MM R

MIC_P 1 JB
MIC_N 2
IN_L 3
HP_L 5
HP_R 6
GND HP_R 6
Conn_01x06_Female

UI I2C - 1MM B

+3.3V 1 J7
UI_SCL 2
UI_SDA 3
GND
Conn_01x04_Female

LED - 1MM T

+3.3V 1 J14
UI_LED_B 2 R33
UI_LED_G 3 R34
UI_LED_R 4 R35
GND 5
Conn_01x04_Female

SPEAKER - 2MM R

SPK_LN 1 J2
SPK_LP 2
Conn_01x02_Female

NET I2C - 1MM B

+3.3V 1 J3
NET_SDA 2
NET_SCL 3
GND 4
Conn_01x04_Female

BUTTON - 1MM T

BTN_RST 1 J13
BTN_UI 2
BTN_NET 3
GND 4
Conn_01x04_Female

DEBUG - 2MM L

UI_DBG1 1 R22 J10
UI_DBG2 2 R26
UI_DBG3 3 R27
UI_DBG4 4 R28
NET_DBG5 5 R30
NET_DBG6 6 R31
MGMT_DBG7 7 R29
GND 8
Conn_01x08_Female

EV8 layer build up:
top: High Speed
second: GND
third: 3.3V
bottom: Low Speed